by Terry Rabot, Virginia Rettig, and Scott Wilson

## Black Bears and Songbirds "on Disk"

On the surface, black bears and Lower Mississippi River Valley USGS-National Wetlands Re and U.S. Fish and v. **EUSGS**Black Bears and Songbirds of the Lower Mississippi River Valley

songbirds don't appear to have much in common. After all. most songbirds probably weigh less than a pound, have wings, come in as many colors as the rainbow, and can fill any forest with song. Black bears, on the other hand, can weigh more than 200 pounds as adults, are usually black with some markings, and shuffle through the forest, occasionally emitting a grunt or squeal in their search for food. Unfortunately, in the Lower Mississippi River Valley, black bears and songbirds do have something in common: both are declining in numbers. The reason is simple; black bears and forest interior songbirds need large tracts of forested land, and most of that habitat in the region has disappeared.

In 1992, the Louisiana black bear (Ursus americanus luteolus) was listed by the Fish and Wildlife Service as threatened, the first species dependent on the bottomland hardwood forests of the Lower Mississippi River Valley to receive Endangered Species Act protection. Over 80 percent of the historic bottomland hardwood forest in its historical range has been converted to agricultural lands, and much of what remains is fragmented. This loss of habitat is also reflected in the declining numbers of songbirds that reside in the forest interior. To prevent further habitat fragmentation, biologists and land managers are working to identify high priority areas for reforestation in proximity to existing forested lands.

A key element in any recovery program is education. Anyone with a television and an hour or so to spare can learn about bears and birds, but there has not been a lot of information about habitat loss and fragmentation. In 1995, the Service began to change this by working with the National Wetland Research Center (NWRC) of the U.S. Geological Survey to use "warm and fuzzy" species such as bears and songbirds to illustrate the problems of habitat loss and fragmentation. The result of those efforts was an interactive CD-ROM, "Black bears and Songbirds of the Lower Mississippi River Valley." The CD is made up of three modules: one on the biology and ecology of bears, another on the biology and ecology of declining species of forest interior birds in the southeast, and another on habitat loss and what is being done about it.

All of us involved in developing the CD were determined to make it available to as many school children as possible. Over 600 CDs were initially mailed out to every middle school in Louisiana, with each school getting two copies, one for the science coordinator and another for the library. In addition, the NWRC distributed CDs at over 25 training sessions held Statewide for elementary school teachers. Over 200 copies of the CD were provided to



educators in Mississippi, and another 200 were sent to zoos affiliated with the American Zoo and Aquarium Association. The CD is still available to educators through the Black Bear Conservation Committee's website (http://www.bbcc.org). The Committee is a diverse group that includes representatives of government wildlife agencies, educators, and industry, all of whom are dedicated to the restoration of the Louisiana black bear. It has developed an extensive outreach program, working locally to promote the restoration of the Louisiana black bear through education, research, and habitat management. The CD is an important part of the outreach effort.

Based on the response from teachers and the general public, the CD has been a useful tool that presents the interrelationships of wildlife biology, endangered species recovery, and landscape ecology as a unified concept.

Terry Rabot, a Wildlife Biologist in the Service's Arlington, Virginia, headquarters office, helped to develop the CD in her former position with the Service's Lafayette, Louisiana, Office. Virginia Rettig, Refuge Manager of the Big Branch National Wildlife Refuge in Louisiana and Scott Wilson, Electrical Engineer with the National Wetlands Research Center in Lafayette, also worked on development of the CD.

The female ruby-throated hummingbird lacks the male's colorful throat. This songbird is not in danger of extinction, and biologists managing habitat in the Lower Mississippi River Valley hope to keep it that way.

Corel Corp. photo

Opposite page: The CD won Second Place for Special Communications in the 1999 National Association of **Government Communications "Blue** Panel Awards" competition.